SAN DIEGO COUNTY MULTI-HAZARD MITIGATION PLAN (PLAN)
Planning Group Meeting #3: Monday, August 4 2003, 1:00 PM

Meeting Summary

Herman Reddick gave an introduction that discussed the working group goals and introduced David Marx, Angela Johnson, and Theresa Miller from the URS Team. Each of the present work group team members identified themselves and the jurisdictions/agencies they were representing.

David Marx gave a brief overview of the hazard mitigation planning process. He explained that the project is in the hazard profiling stage and that the focus of the Work Group meeting was to reach consensus as to methodologies utilized in profiling each of the identified hazards and to provide updated jurisdictional information where possible. Marx discussed the project schedule and key dates mentioning that the meeting on September 15th would be a half-day discussion from 11am-5pm. This meeting will break down into jurisdiction focus groups and the initial goals, objectives and mitigation strategy for each jurisdiction would be developed. In addition to the Point of Contact (POC), representatives from each jurisdiction's local planning team were encouraged to attend this meeting. A web address (www.fema.gov/fima/planhowto.shtm) was given out and members were encouraged to read FEMA's How-To-Guides 2 and 7 to help familiarize themselves with the project and their role in the process.

Marx discussed that the group was in the planning process, noting that the asset inventory and loss estimation phases of the risk assessment as well as the capabilities assessment and goals & objectives portions of the mitigation plan itself were upcoming. A display board was presented that identified all action items/homework assignments to date. This table will be updated and e-mailed by URS to the work group team members to help jurisdictions track their participation in the planning process.

Angela Johnson presented the profiling methodologies for each of the hazards, discussing the data used for analysis. URS presented GIS-generated display boards for each of the hazards identified in San Diego County and each of these hazards was discussed as follows:

Coastal Storm/Coastal Erosion/Tsunamis: URS presented a map showing historic tsunami events, coastal erosion data, historic shoreline data, FEMA flood data, wind zone information, drain locations, and low-lying topographic areas that would be most susceptible to coastal flooding. A shoreline assessment study generated by SANDAG and the California Department of Boating and Waterways was discussed as it contained a breakdown of the entire coastline in shoreline risk assessment categories of high, moderate, and low risk. A GIS aerial of Moonlight Beach in Encinitas was shown and discussed in detail since a detailed erosion study had been conducted by the US Army Corps of Engineers (ACOE) for this area. Members were encouraged to forward any similar detailed studies to URS for inclusion in the profiling.

Marx requested that representatives form each city along the coast check to see if other coastal or wave run-up studies have been conducted (or data compiled) in their jurisdictions by their planning, public works departments or others. He requested that any studies that have been conducted and are available be provided. He also mentioned that if data is not available for a coastal jurisdiction, conducting a study to better understand wave run-up potential could be a good mitigation measure for some coastal jurisdictions to include in the mitigation plan. A consensus of the group was reached that URS will use the best available data for

profiling this hazard category. A question was raised relating to evacuation plans and whether those would/could be considered mitigation measures. It was agreed that they should be included.

Dam Failure: URS presented a map showing dam locations, their inundation areas, their hazard ratings, and whether or not each dam location had an emergency plan in place. It was mentioned that Olivenhain Dam was added to the map and that URS was attempting to obtain the inundation areas associated with this new project. There was a question raised as to the hazard ratings and how they were determined. Johnson stated that this was a FEMA-defined category and gave FEMA's definitions for each including high/significant/and low rating definitions. It was discussed whether or not these ratings could be updated/changed. One local jurisdiction felt their hazard ratings were incorrect and mentioned that they would contact the state to resolve and report back to the work group their findings. Marx mentioned that it might be helpful to break this map into water district categories and have each district report back any inconsistencies. This was added to the action items list for the URS team.

It was mentioned that large water tanks were not added to the map for consideration in this category because a good county database was not available. Jurisdictions were therefore encouraged to add these tanks to their inventoried assets lists if they wished them to be considered in this hazard profiling. A question was raised as to what would be considered "large" for purposes of inclusion and Marx stated that "anything large enough to cause worry for collateral damage" should be included. This was added to the jurisdictional action items list as an optional task.

Drought/Water Supply: Drought was again discussed as a possible hazard category for inclusion. It was mentioned that although there is some data available relating to this category (e.g. average precipitation rates, climate zones, landuse data, drought severity index maps, and crop moisture index maps); "drought" as a category was difficult to profile. It was again mentioned that the issue was "water" not "drought" and that there were several local water conservation plans already in place within the County. It was also mentioned that most of the water used in the County was imported and that individual jurisdictions have limited ability to influence this.

A question was raised as to whether or not FEMA money could cover interruption to business (e.g. agricultural fields dry up and lose money due to drought). Marx stated that he was not aware of FEMA funds being awarded to business interruption losses, but it was added to the URS action items list to be researched. It was concluded by the work group that if FEMA covers this, drought would be included as a hazard category; if not, drought would be dropped from the hazard list.

Earthquake: URS presented a map showing fault zones, peak ground acceleration rates, and landslide/liquefaction areas. Soil information was also included in the profiling but not shown on the map. US Geological Survey (USGS) Peak Ground Acceleration (PGA) ratings as well as local PGA ratings were discussed in detail. Marx explained that during an earthquake damage would occur via one of two mechanisms; (1) the ground shaking would cause damage directly to structures if the shaking is severe enough, and (2) groundshaking would cause landslides or liquefaction that would damage structures. He posed the question to the group

whether or not to use as a mitigation planning level 0.4 PGA (a level where significant structural damage would be expected) for ground shaking or a more conservative 0.3 level. The issue of using the USGS zone boundaries or boundaries developed in local studies was also discussed. It was also mentioned that profiling for this category will be handled in the GIS loss estimation tool, HAZUS as recommended by FEMA. Miller mentioned that updated earthquake shaking potential maps were being released in hard copy format only. It was mentioned that this information, when obtained, would be incorporated into the profiling. The group indicated that the more conservative values and boundaries should be utilized as appropriate.

Flooding: URS presented a map showing the FEMA flood information for the county. FEMA breaks down the county into high, moderate, and low risk category areas utilizing the 100-yr and 500-yr flood zones as break points. It was noted that the FEMA flood information utilized in the profiling was obtained through SanGIS. The consensus of the work group was that the FEMA flood mapping was generally good and should be utilized. A question was raised that the date of this information could have been updated recently to include local updates. URS added this to their action items list to contact SanGIS and make sure the data being utilized is FEMA's most current available data.

Wildfire/Structure Fire: URS presented a map showing the wildfire hazard level threat for the entire county. This model, generated in January of 2003 by the California Department of Forestry - Fire and Resource Assessment Program (CDF-FRAP) incorporates fire frequency as well as potential fire behavior. Included in this modeling was a breakdown of the county by surface fuel categories. A fuel ranking model was also an input data source for this overall "threat" model. The fuel ranking methodology included vegetation, topography, weather, wind speed, humidity, temperature, fuel moisture, and slope. It was determined that this was the most complete, accurate, and detailed information available for the entire county and thus would be utilized in the profiling. Historic fire information was also obtained from the USDA Forest Service as well as the Fire Sciences Laboratory. Local jurisdictions were again encouraged to provide jurisdiction-level fire information if they wished it to be included. It was noted that although the map targets "wildfire", structure information would be included in the next portion of the risk assessment and loss estimations would be inclusive of this information. Marx mentioned that a URS action-item was to create jurisdiction-level vulnerable resource and asset maps with this fire threat information included.

Landslides: URS presented a map showing zoned earthquake faults, soil-slip susceptibility information, geohazard information (e.g. landslide/liquefaction/ and slide prone formation areas), high and low liquefaction areas, steep slope areas, historic landslide events, and existing structural information. It was mentioned by a geologist in the work group that the information in maps by Tan does not appear to be included. URS added to their action items to research this. Marx encouraged jurisdictions to identify any areas in their region that were susceptible to landslides if they were not already identified on the map.

FOUO Profiling: Marx discussed the three hazard categories that will be profiled separately. Hazardous Materials Release, Nuclear Materials Release, and Terrorism will be handled in a separate "For Official Use Only" appendix to the overall mitigation plan. Human-caused hazards including modes of contamination, types of

hazards, and extent of contamination will also be addressed in this separate appendix. It was also noted that there are several local plans that discuss these hazard categories in detail. They will be referenced in this appendix rather than duplicating efforts in this plan.

The meeting concluded with a discussion of what's upcoming in the planning process. It was mentioned that URS is in the process of receiving updated asset inventory lists for the county and will generate jurisdictional maps of this information as soon as it is incorporated into the URS GIS repository. When discussing asset inventory, it was mentioned that the City of San Diego have Unreinforced Masonry (URM) building maps and that the City of San Diego lead Ali Fattah should be contacted to obtain this information. URS added this to their action item list.

URS passed out 2 handouts, which will be emailed, to the workgroup. One is a capability assessment worksheet, the other an insert from the FEMA How-to Guide that describes the jurisdiction's role for this portion of the project (Capabilities Assessment/Goals & Objectives). The next meeting will be held at the OES office at 1:00pm on Monday, August 25, 2003.

Action Items

1. URS will email to work group copies of the Action Items Worksheet. Jurisdictional representatives will review and update if necessary.

2. Work Group members in areas along the coast were requested check with their jurisdiction's to identify if coastal erosion or wave run-up studies have been conducted. If available, these studies should be forwarded to URS for inclusion in the Coastal Storm/Coastal Erosion/Tsunami profiling.

3. URS will breakdown dam information by water district for updates and inclusion in the dam failure profiling.

4. URS to include Olivenhain Dam inundation areas if provided by the water district.

5. Jurisdictions to provide URS with the size and location of any water storage tanks that are large enough to cause collateral damage that the jurisdiction is concerned about from a disaster perspective. These tanks will be included in the dam failure profiling.

6. URS to research FEMA funding as it relates to losses due to drought.

7. URS to obtain and incorporate latest USGS earthquake shaking potential mapping.

8. URS to research FEMA data being utilized and update with the most current data for coastal and flood profiling.

9. URS to create jurisdictional-level asset maps with overlays for flood, fire, earthquake, and landslide profile information.

10. URS to research and incorporate "TAN" landslide information into landslide hazard profiling.

11. Jurisdictions to identify areas susceptible to landslides that are not already identified on the profiled map and provide them if they would like them to be considered in the Plan.

12. URS to receive and incorporate latest asset inventory information for jurisdictional-level mapping.

13. URS to research URM building maps, obtain, and incorporate into landslide profiling if possible.

14. Jurisdictions to complete and return Capability Assessment worksheet.

After meeting comments:

Several representatives requested copies of their local jurisdiction maps. Once the updated inventory of assets is received, URS will incorporate this information onto jurisdictional-level hazard profile maps and distribute to each of the jurisdictions.